

After-Action Report

Navy Mitigation Project
(Removal of Creosote Timbers and Debris)

Performed by the crew of the
USS RODNEY M. DAVIS
on
March 2 & 3, 2006

Presented to: Washington State
Department of Ecology
Resource Damage Assessment Committee

Presented by: Navy Region Northwest
Naval On-Scene Coordinator

Presented on: March 28, 2006

REMOVAL OF CREOSOTE TIMBERS AND DEBRIS

Background:

On October 28, 2005, the USS RODNEY M. DAVIS (FFG60) had a fuel spill of diesel fuel marine in Port Townsend Bay near Naval Magazine Indian Island. By letter dated November 9, 2005, the Washington State Department of Ecology notified the Commanding Officer of the USS RODNEY M. DAVIS of its intent to conduct a Natural Resource Damage Assessment. On December 14, 2005, at a regular meeting of the State's Resource Damage Assessment (RDA) Committee, the circumstances of the spill were discussed. At the next meeting of the RDA Committee, on January 11, 2006, the Navy proposed a restoration project, in accordance with WAC 173-183-260 and Navy policy. As RDA Committee members raised questions that could not be answered during the meeting, the Committee approved the project in concept only. On February 8, 2006, a revised proposal was submitted by the Navy and unanimously accepted by the RDA Committee.

Project Summary:

The restoration project was conducted at Naval Magazine, Indian Island and Fort Flagler State Park on March 2nd and 3rd, 2006. A crew of fifty sailors and the Commanding Officer from the USS RODNEY M. DAVIS arrived at Naval Magazine, Indian Island the morning on March 2nd. After a welcome by the Commanding Officer of the base and a project overview / safety brief by the Environmental Officer, the crew got to work. The first day was spent at Naval Magazine, Indian Island removing creosote timbers from Walan Point. Approximately 20 tons of creosote soaked timber were removed from the nearshore environment. The wood was placed in two dumpsters and was sent to the Columbia Ridge Landfill in Arlington, Oregon in accordance with Navy solid waste management procedures and applicable federal, state and local laws.

The second day another fifty sailors and the Commanding Officer arrived at Fort Flagler State Park. After a project overview / safety brief by Mr. Zimmerman, the Park Manager, the crew was divided into groups and walked the beaches (and surrounding park grounds) picking up debris. Approximately thirty bags of debris (containing styrofoam, plastic containers, aluminum cans, glass bottles and paper items) were removed. Tires and other large items were also taken away. Also, at the request of the Park Manager, the crew moved slash piles away from the tree line, so that the piles could be burned by park employees at a later point.

Benefits to the environment:

*Treated wood pilings, timbers, and other wood products have been used in marine construction in the United States for more than a hundred years. Although some woods are more naturally resistant to deterioration, wood construction materials exposed to water must be preserved with chemicals to prevent deterioration and eventual destruction by marine borers such as crustaceans (gribbles, *Limnaria* spp.), mollusks (boring clams, *Teredo* or *Bankia* spp.), and other wood degrading organisms, including fungi. To protect wood from these organisms, preservative formulations must be toxic to the wood-*

degrading organisms. (Creosote Treated in Aquatic Environments: Technical Review and Use Recommendations, October 2005)

Creosote is a black, sticky, tar-like substance used to preserve wood. Creosote is the most commonly used wood preservative worldwide. It typically contains over 160 chemicals and has been produced since the early 1800s.

Nonprofessional use of creosote has been banned in the European Union and the United Kingdom. The U.S. Environmental Protection Agency has published an assessment of creosote and will decide whether creosote should be registered as a pesticide. Meanwhile, in the absence of comprehensive federal regulations, many states and local agencies have implemented their own regulations. For example, the Washington State Ferries has concluded that creosote-treated timbers were significantly degrading the shoreline sediment and water quality in Puget Sound and have commenced a large-scale project to replace all creosote timbers in the ferry system. The Port of Port Angeles has prohibited the installation of creosote-treated timbers in waters under their jurisdiction and the Oregon Department of Environmental Quality, has established best management practices for recreational boating facilities stating that new applications of creosote-treated wood should be avoided and existing creosote-treated wood pilings should be removed. Additionally, all Navy in-water projects in the northwest involving placement or repair of pilings use alternative materials such as concrete, steel, or fiberglass.

Debris such as plastic and Styrofoam -commonly found on beaches- pose an ingestion and entanglement hazard to the marine mammals and avian species known to use the area for foraging and resting. Larger items, such as tires, appliance, and boating material present a visual degradation to the shoreline and potential for direct hazard.

These projects also benefit the participants. At the completion of the project, the Commanding Officer of the USS Rodney M. Davis reported that the crew obtained a deeper appreciation for the natural beauty of the Sound and experienced, close up, the adverse impact that trash and creosote can have on the environment.

Estimated cost of this project.

Naval Magazine Indian Island estimates that it would have cost approximately \$30,000 to hire a contractor to remove, transport and dispose of the 20 tons of creosote timbers that the crew of the USS RODNEY M. Davis cleared from the beach. Mr. Mike Zimmerman, Park Manager, Fort Flagler State Park estimated that it would have cost them approximately \$6,000 to have a company come in and perform the beach debris removal. "I've worked with the Navy before on other environmental projects, so it's always a pleasure to have them come out and beautify our beachfront," said Zimmerman.

References:

Creosote Treated in Aquatic Environments: Technical Review and Use Recommendations. Prepared for NOAA Fisheries. Prepared by Stratus Consulting Inc. with Duke University, October 2005.

Treated Wood Issues Associated with Overwater Structures in Marine and Freshwater Environments, Submitted to the Washington Department of Fish and Wildlife, Washington Department of Ecology & Washington Department of Transportation, Prepared by Ted Poston, Battelle, April 2001.

Archaeological Resources Management Plan for NWS Seal Beach Detachment, Port Hadlock, WA written by W. Andrefsky, et. al. in 1995.

Project Photographs:





